

## GUIDED PROJECT ON PLASMA DONOR APPLICATION SMARTINTERNZ

Category: Red Hat OpenShift

### Project Description:

During the COVID 19 crisis, the requirement for plasma became high and the donor count being low. Saving the donor information and helping the need by notifying the current donors would be a helping hand. In regard to the problem faced, an application is to be built which would take the donor details, store it and inform them upon a request.

Users need to register an account and login to the application. Once the user logs in, he will have a dashboard to view the total number of donors and count of people with specific blood groups. User will have the option to request the blood. Once the user requests, all the people with that blood group will be notified with an SMS.

### Project Workflow:

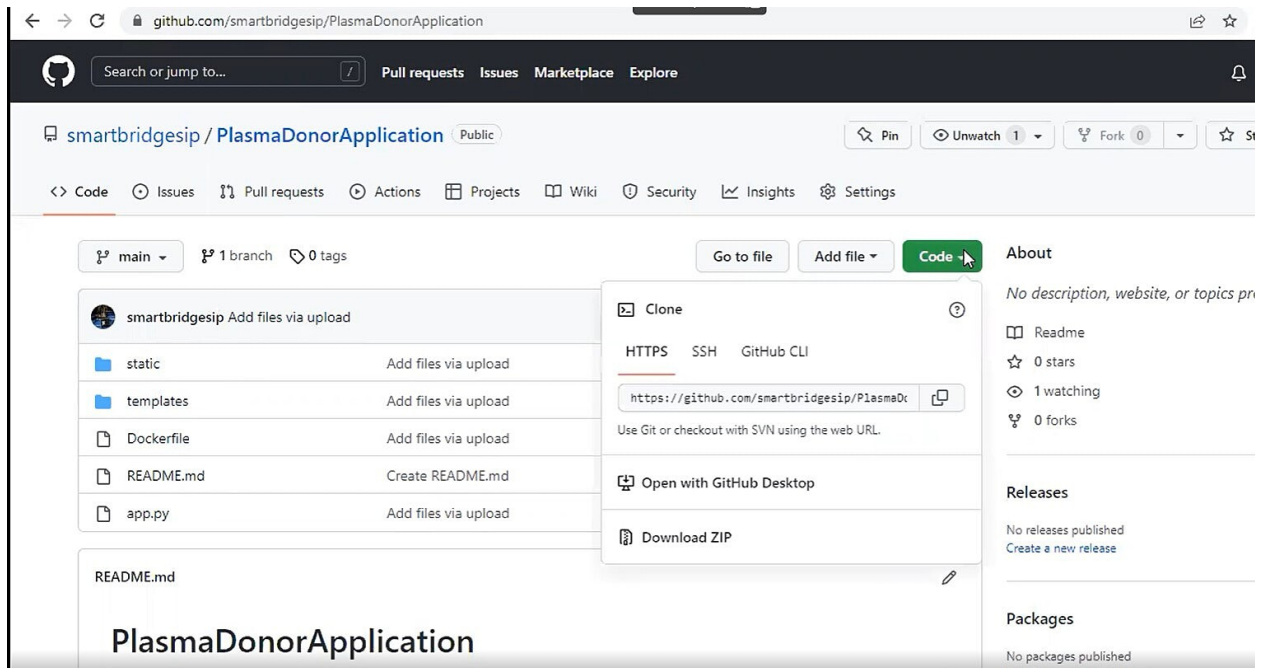
- User interacts with the application.
- Registers by giving the details as a donor.
- Database will have all the details and if a user posts a request then the concerned blood group donors will get notified about it.
- Create the docker image for the application and deploy on Redhat OpenShift dev space.

### Application Environment:

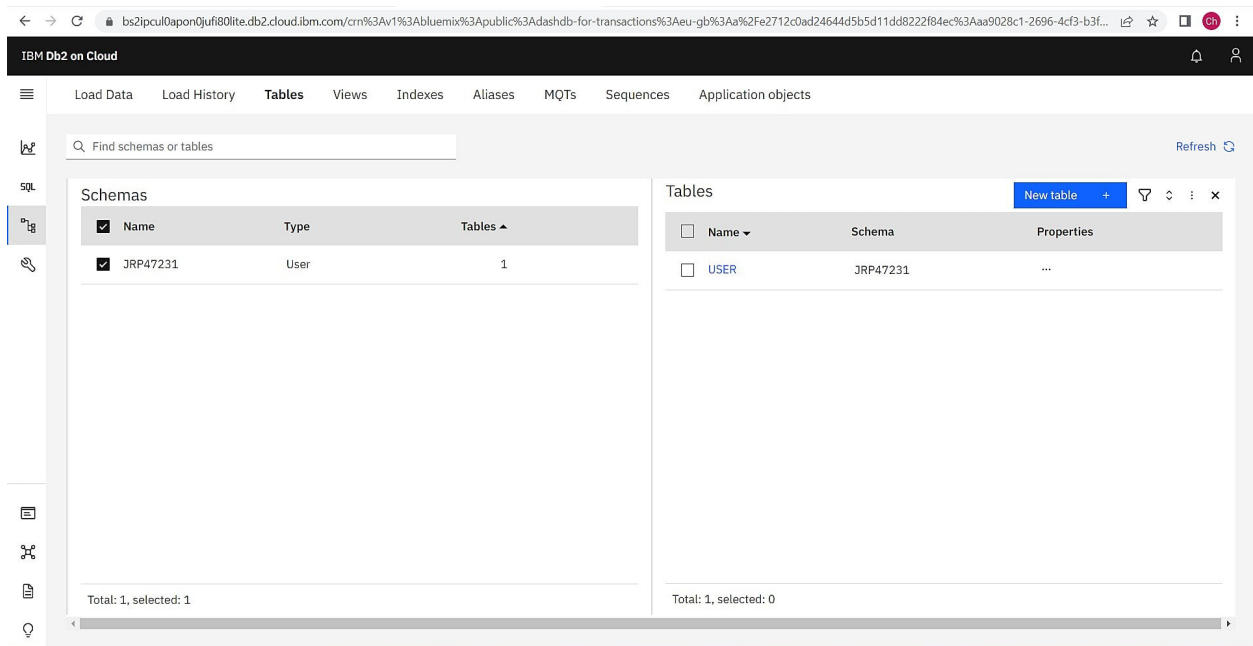
1. Python IDLE
2. Flask
3. IBM DB2
4. Red Hat OpenShift

### Implementing the Web Application:

1. Download the required source code for Plasma Donor App from GitHub.



2. Create an IBM DB2 service in IBM Cloud, and create a table called `user` in DB2 service.



IBM Db2 on Cloud

Load Data Load History **Tables** Views Indexes Aliases MQTs Sequences Application objects

Find schemas or tables Refresh

**Tables** New table +

Name	Schema	Properties
USER	JRP47231	...

Total: 1, selected: 0

**Table definition**

USER Approximate 1 rows (32.0 KB)  
Updated on 2022-07-27 03:43:26

Name	Data type	Nullable	Length	Scale
NAME	VARCHAR	Y	32	0
EMAIL	VARCHAR	Y	32	0
PHONE	VARCHAR	Y	32	0
CITY	VARCHAR	Y	32	0
INFECT	VARCHAR	Y	32	0
BLOODGROUP	VARCHAR	Y	32	0
PASSWORD	VARCHAR	Y	32	0

View data

### 3. Connect the database in DB2 to the Python code.

IBM Db2 on Cloud

Connections

Connect your apps and clients to IBM Db2 on Cloud

Linux PowerLinux Mac Windows

### Instructions

- Download Linux driver package**  
Download Linux driver package from [driver list](#)  
File name: ibm\_data\_server\_driver\_package\_linuxx64\_v11.5.tar.gz (70 MB)
- Run the following example commands to decompress the file**  

```
gunzip ibm_data_server_driver_package_linuxx64_v11.5.tar.gz
tar -xvf ibm_data_server_driver_package_linuxx64_v11.5.tar.gz
```

A dsdriver subdirectory is created.
- Extract the Java and ODBC/CLI drivers by running the following command from the dsdriver directory:**  

```
./installDSDriver
```

The installDSDriver command creates the db2profile and db2cshrc script files in the dsdriver

### Connection configuration resources

**Host name:** 8e359033-a1c9-4643-82ef-8ac06f5107eb.bs2io90l08kqb1od8lcg.databases.appdomain.cloud

**With SSL:** Yes

**Port number:** 30120

**Database name:** bludb

**User ID:** <user name>

**Password:** \*\*\*\*\*

**Version:** Compatible with Db2, Version 11.5.0 or later

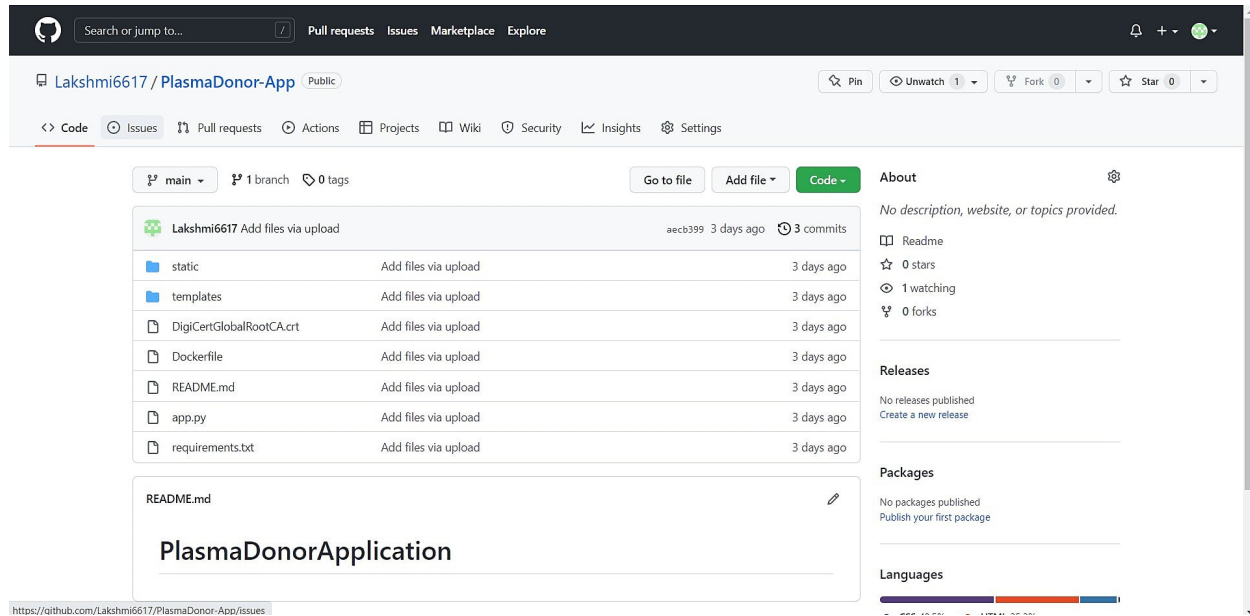
[Download SSL Certificate](#)

**JDBC string**

```
jdbc:db2://8e359033-a1c9-4643-82ef-8ac06f5107eb.bs2io90l08kqb1od8lcg.databases.appdomain.cloud:30120/bludb:user=<user name>;password=<your_password>;sslCo
```

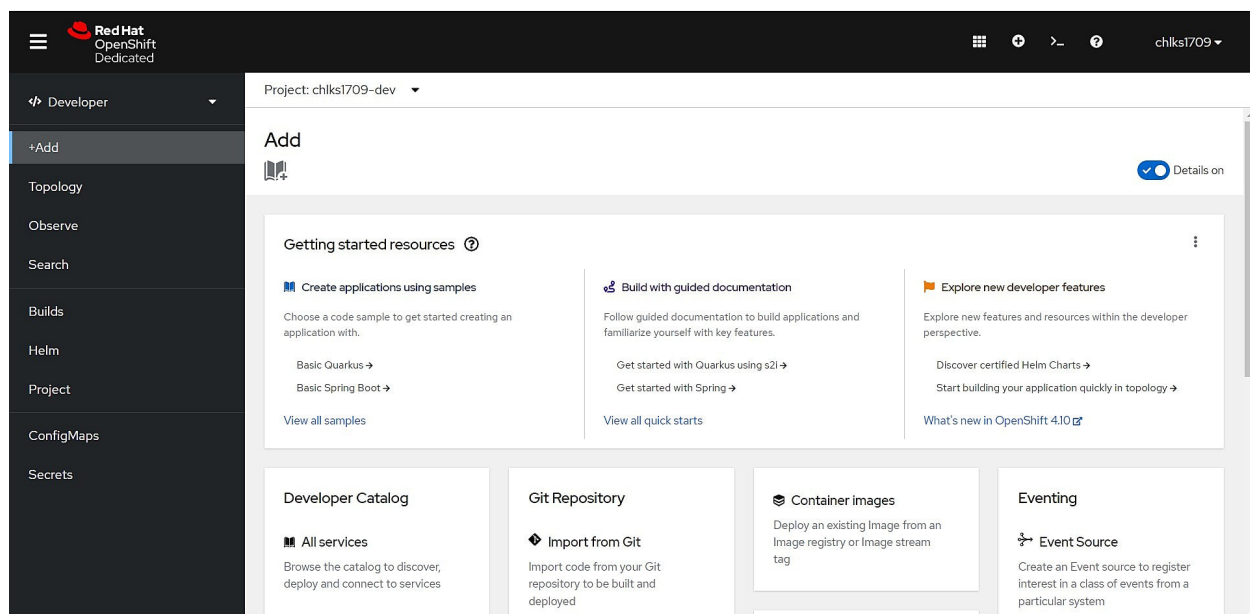
Uploading the source code to GitHub:

1. Upload the source code created into a new repository in our github account.

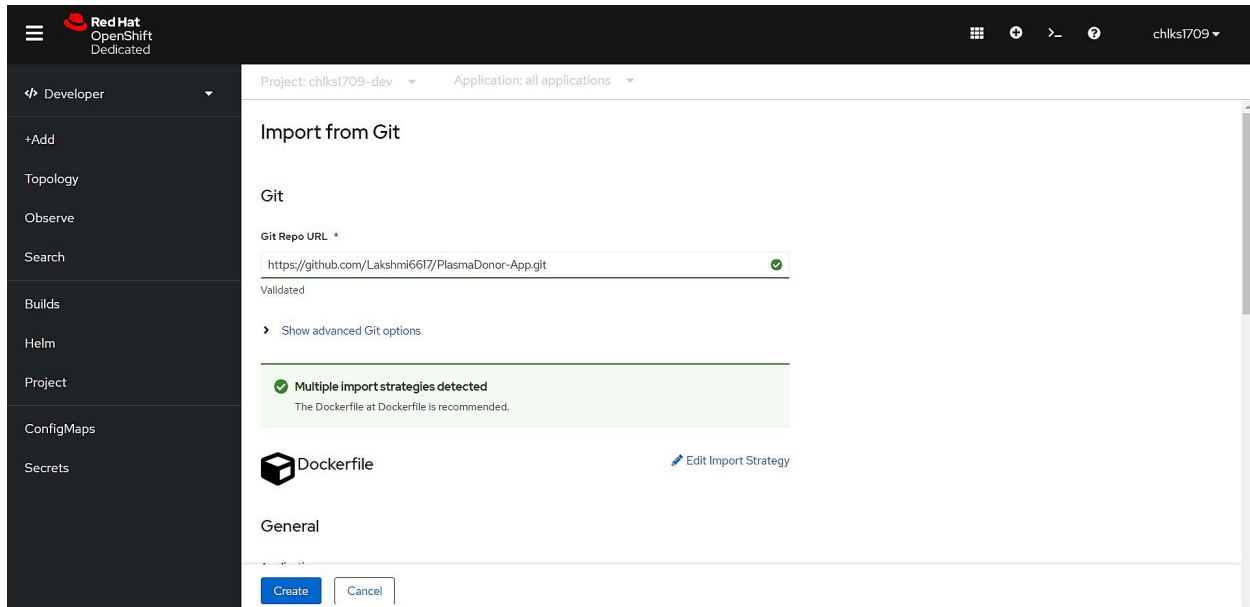


Deploying app on Red Hat OpenShift Dedicated:

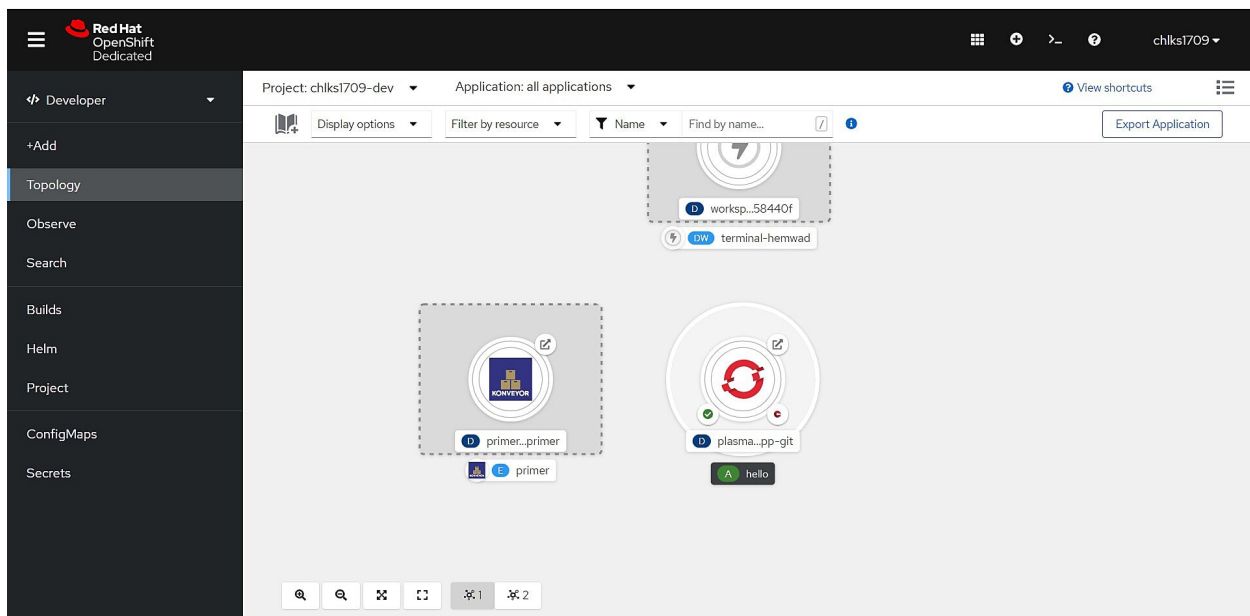
1. Open the Red Hat OpenShift Dedicated Account.
2. Create an application in Developer tab.

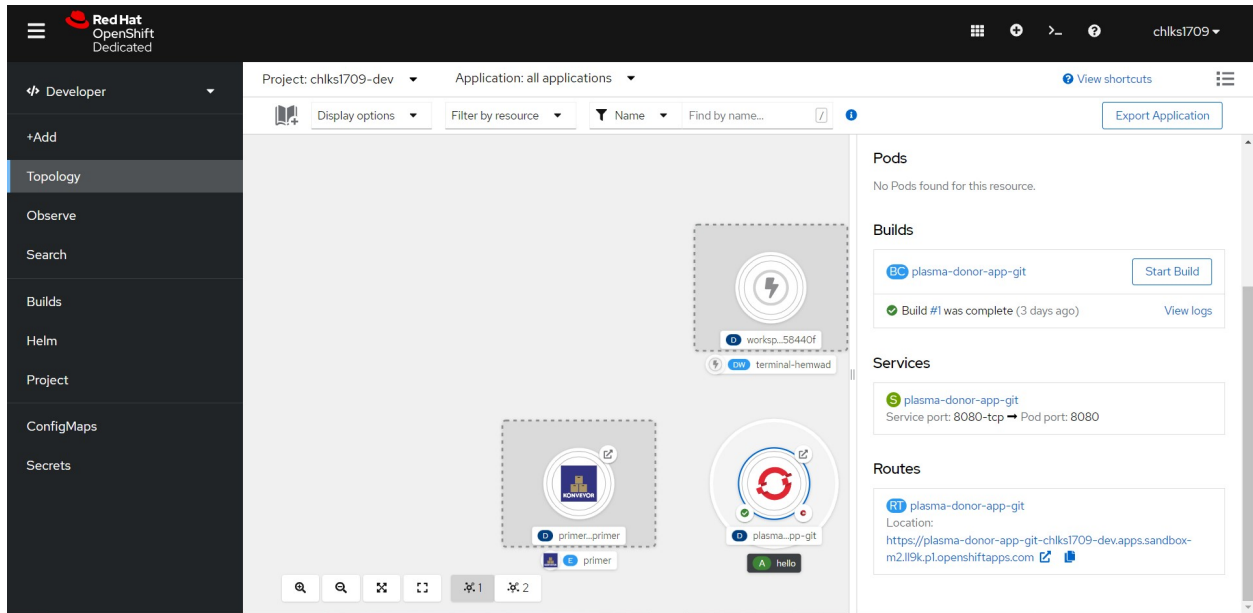


3. Enter the git repository link for uploading the application in to OpenShift Dedicated SandBox.

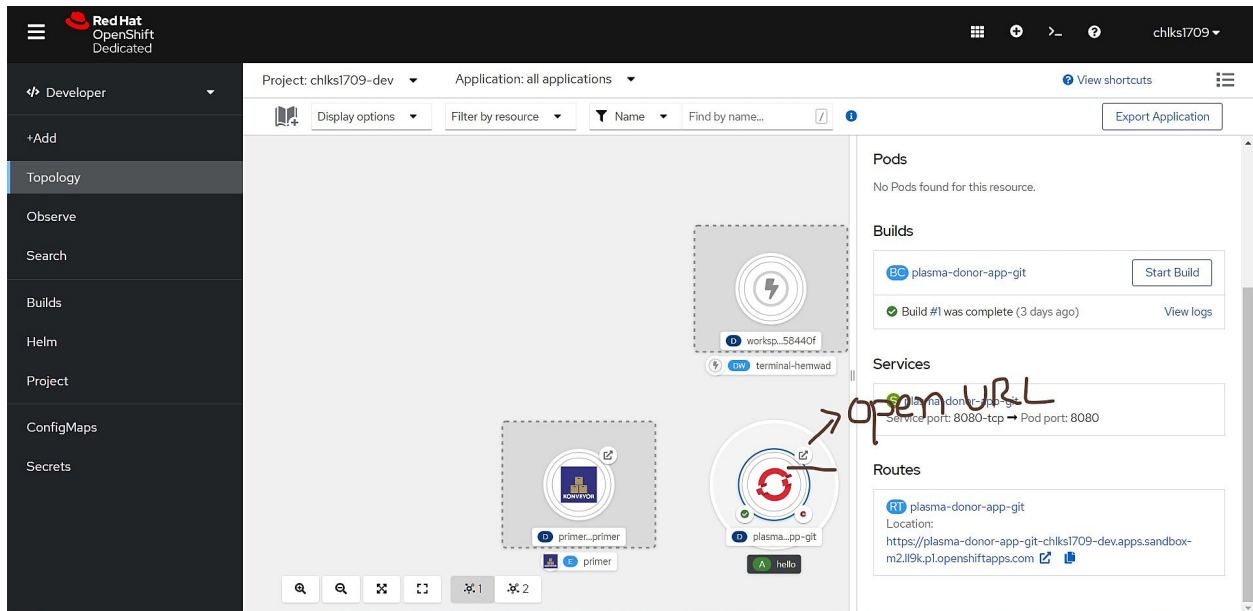


4. Now the application is created. Check the application in Topology tab.



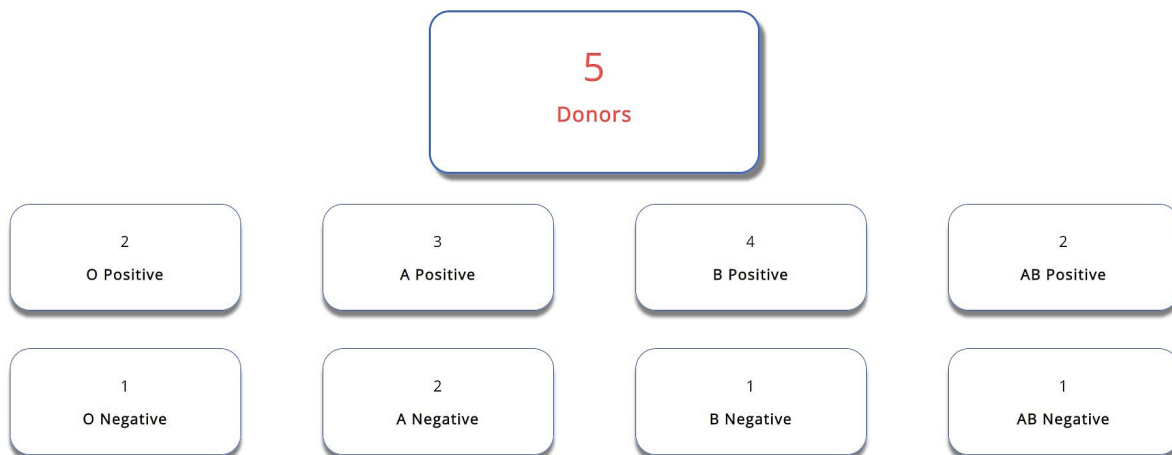


5. After the application is ready and build was complete, click on open URL option.



6. Now we can use the application and the data is stored in the database created in IBM DB2 service.

Login



← → ↻ plasma-donor-app-git-chlks1709-devapps.sandbox-m2.l19kp1.openshiftapps.com/requester

Plasma Donor App Home Register Request

B Positive

Enter the address

Submit the request

← → ↻ plasma-donor-app-git-chlks1709-devapps.sandbox-m2.l19kp1.openshiftapps.com/registration

Plasma Donor App Home

LAKSHMI

cherukupallin1709@gmail.com

1234567890

xf

Uninfected

B Positive

.....

Register

7. The registered data in the application is reflected in the IBM DB2 service.





SQL



JRP47231.USER

Back



Export to CSV



NAME	EMAIL	PHONE	CITY	INFECT	BLOODGROUP	PASSWORD
LAKSHMI	cherukupallins1709@gmail.com	1234567890	xf	uninfected	B Positive	Jesus
Laks	chks1709@gmail.com	1234567890	delhi	uninfected	B Positive	Jesus

